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No. 01-1849

IN THE
Supreme Court of the United States

INFINITE PICTURES, INC.,
Petitioner,

v.

INTERACTIVE PICTURES CORPORATION,
F/K/A OMNIVIEW, INC.,
Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

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QUESTION PRESENTED

Respondent's patent covers a revolutionary and commercially successful system for transforming a distorted "fisheye" image into a perspective corrected view. A jury found Petitioner liable, under the doctrine of equivalents, for infringing Respondent's patent. Petitioner challenged the jury's verdict on numerous grounds, but the District Court denied Petitioner's challenges. Petitioner then appealed the judgment to the Court of Appeals for the Federal Circuit, which unanimously affirmed the jury's verdict, finding substantial evidence to support the infringement findings.

After the Federal Circuit's decision, Petitioner filed a petition for rehearing *en banc*, arguing for the first time in its rehearing petition that the doctrine of equivalents cannot, as a matter of law, be applied to any claim element written in accordance with 35 U.S.C. § 112, sixth paragraph ("means-plus-function" form). The Federal Circuit declined to entertain this new argument, which had never before been presented, and denied Petitioner's rehearing petition. Petitioner now asks this Court to rule in the first instance on its new argument. The question presented by the petition, therefore, is:

Whether this Court should entertain a new issue presented for the first time in a petition for rehearing in the Federal Circuit and, even if the issue were to be considered, whether this Court's precedents foreclose Petitioner's arguments?

CORPORATE DISCLOSURE STATEMENT

There are no parent corporations of Respondent and there are no publicly held companies that own 10% or more of the stock in Respondent.

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BRIEF IN OPPOSITION

The Federal Circuit concluded that the jury's infringement findings were supported by substantial evidence, and that prosecution history estoppel did not bar Respondent from asserting infringement under the doctrine of equivalents. Although Petitioner relied heavily in the Federal Circuit on that court's recently vacated decision in *Festo Corp. v. Shoketsu Kogyo Kabushiki Co.*, 234 F.3d 558 (Fed. Cir. 2000) (*en banc*), *vacated by* 122 S. Ct. 1831 (2002), Petitioner has now switched horses and directly attacks the availability of the doctrine of equivalents for claim limitations written in what it calls "functional" language. This Court should decline to entertain this newly raised argument. Even were the Court to consider this new issue, Petitioner's argument has already been foreclosed by this Court's decision in *Warner-Jenkinson Co. v Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). Consequently, the petition raises no important new issues and it should be denied.

STATEMENT OF THE CASE

A. The Patent

Respondent's patented invention provides an image viewing system that allows a user to interactively view a photographic image within a hemispherical (180-degree) field of view on a computer screen. The invention provides the electronic equivalent of a mechanical pan, tilt, magnification, and rotation camera viewing system with no moving parts. The system includes a camera and a fisheye lens that captures a hemispherical field of view, which is round and distorted.

According to the patented invention, a user can change the viewing angle and magnification without physically moving the camera or lens. This is made possible by digitizing the image and storing the image in a memory. An image processing system transforms the digitized image signals to remove distortion from a portion of the image, producing a perspective corrected view of the selected region. Output signals corresponding to the transformed image are stored in a second memory for viewing on a display device.

At the time the patent was filed, various formats, including an equirectangular format, were known in the art for digitally representing and storing spherical image data in a memory. Nothing in the patent or the prosecution history limited the claimed invention to a particular image storage format.

B. The District Court Proceedings

A jury trial was held on the question of infringement. The jury heard evidence showing how Petitioner's SmoothMove Panorama Web Builder software was used in combination with a camera and a fisheye lens to permit interactive viewing of photographic images. The accused software transformed distorted photographic images taken with a fisheye lens into perspective corrected images based on user inputs. Petitioner's system was slightly different from the patented invention because, instead of transforming the digitized signals, it first converted the signals into an equirectangular format before it transformed the equirectangular format into the perspective corrected images.

The asserted patent claim recites the transformation function as part of a "means-plus-function" limitation, requiring an "image transform processor means" that operates on digitized image signals and corresponds to structures described in the patent. Because Petitioner's system processed signals in an equirectangular format, that system did not perform the identical function of "processing said digitized [fisheye] signals" as required by the claim. Respondent asserted that Petitioner's system performed this function equivalently, since the mere substitution of a different image format for storing the signals constituted an insubstantial change from the claimed function.

The jury concluded that Petitioner's system infringed under the doctrine of equivalents and awarded $1 million in patent infringement damages. Petitioner challenged the jury's verdict on numerous grounds, including attacks on the sufficiency of the evidence and arguments that Respondents were precluded under the doctrine of prosecution history estoppel from asserting any equivalence. The District Court denied Petitioner's motions and entered judgment for Respondent.

C. The Federal Circuit's Decision

The Federal Circuit unanimously affirmed the decision of the District Court, concluding that prosecution history estoppel did not apply because the minor amendment made to the claim was not a narrowing amendment under the rationale of *Festo*. The Federal Circuit also rejected Petitioner's arguments that (1) equivalence was foreclosed by the prior art; (2) equivalence was precluded under the holding of that court's decision in *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus.*, 145 F.3d 1303 (Fed. Cir.

1998); and (3) the evidence regarding equivalence was insufficient to show infringement. Petition at App. 17a-25a.

After the Federal Circuit's decision, Petitioner filed a petition for rehearing *en banc* in which it directly attacked the availability of the doctrine of equivalents for any claim element written in means-plus-function form. In contrast to its prior arguments to the Federal Circuit, which were based primarily on *Festo*-type estoppel, Petitioner for the first time cited and heavily relied on this Court's now-overruled decision in *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1 (1946) in support of its new argument. The Federal Circuit denied the petition for rehearing.

REASONS FOR DENYING THE PETITION

Petitioner has raised a multitude of issues in its petition, at least two of which were never before raised in the Federal Circuit and therefore could not have been addressed by that court. Even were this Court to consider those new issues, Petitioner's arguments have already been foreclosed by this Court's established decisions.

A. This Court Should Decline to Entertain Petitioner's New Arguments

Petitioner's opening argument – that the doctrine of equivalents cannot be applied to claim elements written in "functional" form – was never presented in the Federal Circuit until Petitioner filed its petition for rehearing *en banc*. In accordance with established practice, the Federal Circuit declined to entertain that new issue. *See Pentax Corp. v. Robinson*, 135 F.3d 760, 762 (Fed. Cir. 1998) ("Just as this court will not address issues raised for the first time

on appeal or issues not presented on appeal, we decline to address the government's new theory raised for the first time in its petition for rehearing."); *Singleton v. Wulff*, 428 U.S. 106, 120 (1976) ("It is the general rule, of course, that a federal appellate court does not consider an issue not passed upon below.").

Respondent has attached at appendix pages 1a to 4a hereto the complete table of contents from Petitioner's opening brief in the Federal Circuit, showing that no such argument was presented in its brief. Having never had an opportunity to rule on that issue in the first instance, the Federal Circuit cannot be faulted for failing to adopt Petitioner's new argument.

Petitioner also raises the new argument that "[t]he district court used an expansive claim construction, made without regard to the construction procedure mandated by § 112(6). This construction permitted a finding of infringement . . . ." Petition at p. 6 (citing "error in claim construction" and allegedly erroneous jury instruction). Petitioner's attack on the District Court's claim construction and the jury instruction also were never before presented to the Federal Circuit and could not have been addressed in its opinion. In any event, contrary to Petitioner's new assertion, the District Court correctly instructed the jury regarding how to interpret the means-plus-function limitation according to the statute. App. 5a-25a

This Court has adopted a general rule against hearing issues not decided upon by the court below. *EEOC v. FLRA*, 476 U.S. 19, 24 (1986). This rule is a prudential rule that can be followed by the Court at its discretion. See 19 James Wm. Moore et al., Moore's Federal Practice § 205.05, at

205-57 to 205-58 (3d ed. 1997). The Court has chosen to waive this rule only in "exceptional cases or particular circumstances . . . where injustice might otherwise result." *Hormel v. Helvering*, 312 U.S. 552, 557 (1941). Although the Court has carved out exceptions to this general rule over the years, Petitioner's situation does not fall within any of those narrow exceptions.

For example, this Court has held that a conflict-of-interest issue regarding an attorney involved in a particular case could not realistically have been raised by the attorney whose conflict was under challenge. *Wood v. Georgia*, 450 U.S. 261, 265 n.5 (1981). In another case, an issue was first raised before this Court, but neither party objected. Because both parties supported hearing the issue, and because the issue was closely related to other main questions in the case, the Court found no reason to deny hearing an issue not heard in the lower courts. *Carlson v. Green*, 446 U.S. 14, 17 n.2 (1980).

Petitioner's situation, however, does not present similar circumstances. Unlike *Carlson*, Respondent objects to raising the new issues for the first time in this Court. Unlike *Wood*, where the Petitioner could not have raised the issue in the lower court, Petitioner in this case could have easily raised these issues before the Federal Circuit but did not do so. The focus of Petitioner's appeal to the Federal Circuit was *Festo*-created estoppel. In light of this Court's vacation of *Festo*, Petitioner has apparently switched horses and taken a different tack in this Court.

The facts and procedural history in this case more closely follow numerous other cases in which a petitioner, without explanation, failed to present an issue before the

Court of Appeals, and subsequently asked this Court to hear the issue on appeal. See, e.g., *EEOC v. FLRA*, 476 U.S. 19 (1986); *Rogers v. Lodge*, 458 U.S. 613, 628 n.10 (1982); *Adickes v. Kress & Co.*, 398 U.S. 144, 147 n.2 (1970); *Lawn v. United States*, 355 U.S. 339, 362-363 n.16 (1958); *Husty v. United States*, 282 U.S. 694, 701-702 (1931). In each of those cases, this Court declined to waive its general rule. Accordingly, the Court should decline to hear Petitioner's arguments with respect to the availability of the doctrine of equivalents to means-plus-function claims and its contentions regarding allegedly erroneous claim construction.

B. Congress Did Not Intend to Displace the Doctrine of Equivalents for "Functional" Elements

Petitioner asserts that in enacting 35 U.S.C. § 112, sixth paragraph, Congress intended to displace any application of the doctrine of equivalents for claim limitations written in that form (i.e., means-plus-function form). Petitioner also refers more generally to any claims written using "functional" language, creating an unlimited and unwarranted loophole covering claims not even written in accordance with § 112, sixth paragraph. Petition at pp. 10-11 (referring to "functionally-claimed elements;" "functional claim elements;" and "functional claim language.") In support of its argument, Petitioner relies on this Court's *Halliburton* decision, which was legislatively overruled by Congress when it enacted 35 U.S.C. § 112, sixth paragraph. Petition at p. 11.

It is manifest that this Court's *Halliburton* decision, which was legislatively overruled by Congress, cannot form

the basis for overruling later court decisions, including those of this Court. Petitioner's statement that "*Halliburton* remains authority for the position that a functional claim element, unbounded by the statutory requirements of § 112(6), is invalid," Petition at p. 12, either poses a question not raised by this case – given that the claim limitation at issue was drafted according to § 112(6) and thus cannot be "unbounded" by it – or constitutes a collateral attack on the District Court's claim interpretation and jury instruction, an issue that Petitioner waived by not previously presenting it below.

In *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997), this Court specifically rejected the argument that Congress intended to displace the doctrine of equivalents when it enacted the sixth paragraph of 35 U.S.C. § 112. In that case, this Court stated that:

> Congress in 1952 could easily have responded to *Graver Tank* as it did to the *Halliburton* decision. But it did not . . . . The lengthy history of the doctrine of equivalents strongly suggests adherence to our refusal in *Graver Tank* to find that the Patent Act conflicts with that doctrine. Congress can legislate the doctrine of equivalents out of existence any time it chooses. The various policy arguments now made by both sides are thus best addressed to Congress, not this Court.

Warner-Jenkinson, 520 U.S. at 28.

Having rejected the broad argument that Congress intended to displace application of the doctrine of

equivalents when it enacted the sixth paragraph of 35 U.S.C. § 112, it follows that Petitioner's narrower argument – that Congress must have intended to displace application of that doctrine where "both forms of equivalents [§ 112(6) and doctrine of equivalents] were implicated," Petition at p. 11-12, must also be rejected. Petitioner provides no logical basis for carving out vaguely defined exceptions for "functional claim elements."

Petitioner also states on page 11 of its petition that "[c]laim construction concerns are different when dealing with functional claim language as opposed to structural claim language," and that those different concerns warrant a different result with respect to application of the doctrine of equivalents. Petitioner's argument improperly confuses policies underlying claim construction with policies underlying the doctrine of equivalents. Claim construction concerns a determination of the *literal scope* of a claim based on the claim language, the specification, and the prosecution history. On the other hand, the doctrine of equivalents permits a patent owner to cover devices that are outside the literal scope of the properly construed claims to prevent a fraud on the patent. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1317 (Fed. Cir. 1998) ("any analysis of infringement under the doctrine of equivalents necessarily deals with subject matter that is 'beyond,' 'ignored' by, and not included in the literal scope of a claim."). Any policy difference arises from the different nature of these two doctrines, not due to the "functional" or "structural" nature of the claim language.

To the extent that Petitioner's argument refers to "functional" claim language that is not drafted in accordance with the means-plus-function requirement of § 112, sixth

paragraph, the argument concerns a hypothetical problem not posed by this case, since it is undisputed that the claim limitation at issue was drafted and interpreted under the confines of that statutory section.

C. There is No Conflict Between the Doctrine of Equivalents and 35 U.S.C. § 112, Sixth Paragraph

Petitioner argues that there is a conflict in applying the doctrine of equivalents to claim limitations drafted in means-plus-function form, since the latter provides "statutory equivalence" beyond which no further equivalance should be permitted. To the contrary, the Federal Circuit in this case explained why the doctrine of equivalents can properly be applied to a claim limitation written in means-plus-function format:

> However, when a finding of noninfringement under 35 U.S.C. § 112, paragraph 6, is premised on an absence of identical *function*, then infringement under the doctrine of equivalents is not thereby automatically precluded. *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1353, 51 USPQ2d 1385, 1395 (Fed. Cir. 1999). That is because infringement under the doctrine of equivalents may be premised on the accused and the patented component having *substantially* the same function, whereas structure corresponding to the disclosed limitation in a means-plus-function clause must perform the *identical* function. *Id.*

Petition at App. 21a (emphasis in original). In other words, applying the doctrine of equivalents to a claim limitation written in means-plus-function form prevents the accused infringer from avoiding infringement by making an insubstantial change to the function, as occurred in this case. *See also, Pennwalt Corp. v. Durand-Wyland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (*en banc*) ("If the required function is not performed exactly in the accused device, it must be borne in mind that section 112, paragraph 6, equivalency is not involved. Section 112, paragraph 6, plays no role in determining whether an equivalent function is performed by the accused device under the doctrine of equivalents."). By its literal terms, 35 U.S.C. § 112, sixth paragraph only addresses equivalency of structure, not of function.

The distinction between equivalency in structure and equivalency in function also distinguishes Petitioner's situation from the facts of *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303 (Fed. Cir. 1998), another case heavily relied on by Petitioner in its Federal Circuit brief. In *Chiuminatta*, the Federal Circuit concluded that where equivalence was asserted solely on the basis of the structures appearing in the specification, the doctrine of equivalents could not be extended to cover structures that pre-dated the patent. That situation does not apply where the asserted equivalency concerns the recited function rather than the corresponding structures. *Accord, WMS Gaming, Inc. v. International Game Tech.*, 184 F.3d 1339, 1353 (Fed. Cir. 1999) (distinguishing *Chiuminatta Concrete* on that basis).

Petitioner also suggests (Petition at p. 13) that there is doubt among Federal Circuit judges regarding whether the doctrine of equivalents can apply to claim elements drafted

in accordance with § 112(6). Petitioner points to "additional views" of Judges Plager and Michel as set forth in *Dawn Equipment Co. v. Kentucky Farms Inc.*, 140 F.3d 1009 (Fed. Cir. 1998). In that case, a Federal Circuit panel reversed a jury finding of infringement of a means-plus-function claim under the doctrine of equivalents. That case is readily distinguishable.

In *Dawn Equipment*, the accused device had an identical function, but a clearly different structure. The jury found infringement under the doctrine of equivalents. The panel overturned the jury verdict, noting that despite the identity in function between the claim and the accused device, the structure of the accused device was so different from the structure described in the specification that no reasonable jury could have found them to be equivalent.

Contrary to Petitioner's suggestion, neither Judge Plager nor Judge Michel questioned "whether the doctrine of equivalents can apply to § 112(6) claim elements." Judge Plager noted first that "there appears to be no genuine issue with regard to the specified functions; the accused device appears to perform the functions recited in the means-plus-function claim limitations . . . ." *Id.* at 1020. He found it disturbing and confounding that the jury did not find literal infringement but still found infringement under the doctrine of equivalents, because to do so would have meant that the jury applied two different standards for structural equivalence – a narrow one in the literal infringement determination and a broader one in the doctrine of equivalents analysis. *Id.* Judge Plager concluded by suggesting that the doctrine of equivalents should not be applied to "the 'equivalents' of 'structure, material, or acts described in the specification'" in determining infringement

of a means-plus-function claim. *Id.* at 1021-22. Nothing in Judge Plager's remarks, which were not part of the holding of the case, indicated that he believed that the doctrine of equivalents was inapplicable to a means-plus-function claim.

Petitioner alleges that Judge Michel's remarks show that he doubted the applicability of the doctrine of equivalents to means-plus-function claims. It is clear from the facts of that case, however, that Judge Michel was merely suggesting that the court should decide whether there could be an "equivalent" (under the doctrine of equivalents) of an equivalent *structure* as defined by § 112(6). *Id.* at 1022-23. Judge Michel was not suggesting that the doctrine of equivalents could not apply to equivalency of function in means-plus-function claims, but instead posed the question: Whether there could, under the statutory scheme provided by § 112(6), be an "equivalent" of an equivalent structure. Petitioner urges this Court to answer the question posed by Judge Michel; yet the issue in this case (equivalency of function, not structure) is not the one posed by Judge Michel.

Federal Circuit precedent makes clear that infringement of a means-plus-function claim under the doctrine of equivalents is appropriate. In *Pennwalt v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987) (*en banc*), the court undertook a complete doctrine of equivalents analysis with respect to the means-plus-function claim at issue. If, as Petitioner suggests, such equivalence were precluded as a matter of law, the *en banc* Federal Circuit would not have conducted such an analysis.

Petitioner's question in this case was presented to the full Federal Circuit in Petitioner's petition for rehearing *en*

banc. That court's denial of the petition, without dissent, indicates that there is no doubt on this issue.

Petitioner also suggests that application of the doctrine of equivalents in this case conflicts with the definitional and public notice function that claims are intended to serve. Petition at p. 14. Petitioner overlooks the fact that this Court addressed that perceived conflict in *Warner-Jenkinson* by recognizing that the doctrine of equivalents should be applied to the individual elements of a claim, and not merely to the claimed invention as a whole. *Warner-Jenkinson*, 520 U.S. at 29. It is also undisputed that in this case every element of the claim was *literally* present in the accused device except for the "image transform processor means," which was found to be equivalently present.

The Federal Circuit's decision is wholly consistent with *Warner-Jenkinson* and *Graver Tank & Mfg. Co. v. The Linde Air Products Co.*, 339 U.S. 605 (1950). By substituting an equirectangular panorama, a known interchangeable alternative, for the claimed digitized fisheye image signals of the claimed invention, Petitioner sought to avoid liability by changing only a minor, insubstantial detail of the claimed invention. Its fate should be no different than the defendant in *Graver Tank*.

On page 15 of its petition, Petitioner argues that the Federal Circuit's analysis improperly relieves the patent owner from the burden of showing structural equivalence separate and apart from functional equivalence, such that patentees can "bypass" the structural equivalents analysis of § 112(6). To the contrary, the Federal Circuit carefully considered the evidence showing that the accused

SmoothMove product used structure that was equivalent to the structure disclosed in the patent. Petition at App. 22a-23a:

> Furthermore, Birdwell testified that the SmoothMove Viewer contains structure the same as or equivalent to the structure corresponding to the 'image transform processor means.' We agree that substantial evidence supports the finding of equivalence. Although Infinite [Petitioner] attacks Birdwell's testimony as being conclusory, the testimony is more than that.

The evidence showing equivalence in structure included trial testimony by Dr. H. Lee Martin, showing that a general-purpose computer could be used to perform the transformations that were performed by the special-purpose circuits disclosed in the patent. App. 26a. Petitioner's own software engineer, Scott Gilbert, admitted that the SmoothMove software performed the image transformation by implementing geometry equivalent to that disclosed in Figure 4 of the patent. App. 27a-28a.

And unlike the situation in *WMS Gaming*, the structure disclosed in the patent for the image transform processor means was not limited to a specific mathematical algorithm, but instead encompassed a range of lens types and corresponding algorithms. App. 29a. Consequently, Petitioner's complaints concerning equivalency in structure are nothing more than an attack on the sufficiency of the evidence, a ground on which this Court rarely grants petitions for a writ of certiorari.

D. No Claim Element Was "Entirely Vitiated"

Petitioner argues on page 18 of its petition that the Federal Circuit's decision in this case has allowed the doctrine of equivalents to "entirely vitiate" a required function of the claim. Its argument relies on the Federal Circuit's decision in *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987) (*en banc*). This argument is in the nature of an allegedly erroneous factual finding, a ground on which this Court rarely grants petitions for a writ of certiorari.

In *Pennwalt*, the Federal Circuit held that where a claimed function was completely missing from the accused device, and there was no equivalent function in the accused device, there could be no infringement either literally or under the doctrine of equivalents. The rule applied in *Pennwalt*, otherwise known as the "all elements rule," provides that a claim can be infringed only if every limitation in the claim is found in the accused device, either literally or by a substantial equivalent. *Pennwalt*, 833 F.2d at 936.

Petitioner argues that the court found no infringement in *Pennwalt* because the claim in that case required that a "position indicating means" be "responsive to a signal from said clock means and said signal from said second comparison means." According to the court, the requirement of responsiveness to a specific combination of signals was clearly missing from the accused system. Because one of the elements of the claim was not present in the accused device, the "all elements rule" was not satisfied and there could be no infringement.

Petitioner argues that this case is similar to *Pennwalt* in that "the accused device in this case lacks a means operative in response to the specified (and claimed) combination of signals." Petition at p. 19. Petitioner repeatedly refers to the claimed function as requiring a "direct transformation" of signals, a phrase that nowhere appears in the claim. Because Petitioner has mischaracterized the claimed function, its argument carries no weight.

In *Pennwalt*, the Federal Circuit viewed the two functions to be separate and distinct limitations, whereas in this case, the Federal Circuit concluded that only a single limitation was at issue. Petition at App. 24a ("As a preliminary matter, we consider the entire 'image transform processor means' with its two associated functions to be one limitation."). Because the jury found that this single limitation was met by an equivalent in the accused device, Petitioner's attempt to parse the single limitation into pieces and then show the non-equivalence of individual pieces is of no effect. Consequently, there was no violation of the "all elements" rule.

Petitioner also argues that the Federal Circuit's holding permits claim elements to be rewritten in isolation without regard to the context of the claim as a whole. Petition at p. 16. Petitioner's argument misses the mark completely. It is undisputed that every claim element except the image transform processor means was literally present in the accused SmoothMove product. The relevant inquiry is not whether equirectangular panorama signals can be physically substituted for digitized fisheye signals wherever digitized fisheye signals are used in the claimed device, but

rather whether the SmoothMove product includes equivalent structure that performs substantially the same function as the image transform processor means. The Federal Circuit panel amply explained why mere incompatibility among data storage formats did not give rise to a substantial difference. Petition at App. 23a.

CONCLUSION

This Court recognized in *Graver Tank* that the purpose of the doctrine of equivalents is to prevent an accused infringer from avoiding liability by changing only minor, insubstantial details of the claimed invention, while still retaining the essential elements of the invention. As this Court noted, "[o]utright and forthright duplication is a dull and very rare type of infringement." *Graver Tank*, 339 U.S. at 607. This case represents a classic application of that doctrine. Petitioner perpetrated a fraud on the patent by making an insubstantial change – substituting an equirectangular panorama format, a known interchangeable alternative, for the claimed digitized fisheye image format, and achieved the same results as the claimed invention. Because the petition raises no important question requiring resolution by this Court, the petition should be denied.

Respectfully submitted,

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Excerpt from Jury Instructions:

AS YOU WILL SEE FROM YOUR REVIEW OF THE '667 PATENT, SOME OF THE ELEMENTS OF CLAIMS 1 THROUGH 8 OF THE PATENT ARE EXPRESSED AS MEANS TO ACCOMPLISH STATED FUNCTIONS. FOR EXAMPLE, THE IMAGE TRANSFORM PROCESSOR MEANS ELEMENT OF CLAIM 1 OF THE '667 PATENT IS STATED AS

> IMAGE TRANSFORM PROCESSOR MEANS FOR PROCESSING SAID DIGITIZED SIGNALS IN SAID INPUT IMAGE MEMORY MEANS ACCORDING TO SELECTED VIEWING ANGLES AND MAGNIFICATION, AND FOR PRODUCING OUTPUT TRANSFORM CALCULATION SIGNALS ACCORDING TO A COMBINATION OF SAID

DIGITIZED SIGNALS, SAID SELECTED VIEWING ANGLES AND SAID SELECTED MAGNIFICATION.

A CLAIM ELEMENT EXPRESSED IN SUCH A MANNER IS REFERRED TO AS A MEANS PLUS FUNCTION CLAIM ELEMENT. SUCH A CLAIM ELEMENT IS PERMITTED BY TITLE 35, UNITED STATES CODE, SECTION 112, PARAGRAPH 6 WHICH STATES,

AN ELEMENT IN A CLAIM FOR A COMBINATION MAY BE EXPRESSED AS A MEANS OR STEP FOR PERFORMING A SPECIFIED FUNCTION WITHOUT THE RECITAL OF STRUCTURE, MATERIAL, OR ACTS IN SUPPORT THEREOF, AND SUCH CLAIM SHALL BE CONSTRUED TO COVER THE CORRESPONDING

STRUCTURE, MATERIAL, OR ACTS

DESCRIBED IN THE SPECIFICATION

AND EQUIVALENTS THEREOF.

TO PROVE LITERAL INFRINGEMENT OF A CLAIM ELEMENT STATED IN MEANS PLUS FUNCTION LANGUAGE, THE PATENT OWNER MUST PROVE BY A PREPONDERANCE OF THE EVIDENCE THAT SOME ELEMENT OF THE ACCUSED DEVICE PERFORMS IDENTICALLY THE SAME FUNCTION AS THE PATENT CLAIM ELEMENT, AND THAT THE STRUCTURE OF THIS ELEMENT OF THE ACCUSED DEVICE IS IDENTICAL OR EQUIVALENT TO THE STRUCTURE OF THE CORRESPONDING PATENT CLAIM ELEMENT THAT IS DESCRIBED IN THE PATENT SPECIFICATION. I REMIND YOU, AS YOU HAVE HEARD THE PATENT-LAW EXPERTS EXPLAIN IN THIS CASE, THAT THE SPECIFICATION OF A PATENT CONSISTS OF ALL THE WORDS USED TO DESCRIBE AND DISCLOSE THE CLAIMED

INVENTION, INCLUDING THE DRAWINGS AND THE PATENT CLAIMS.

WHILE THE STATUTE, SECTION 112, PARAGRAPH 6, PERMITS A PATENT CLAIM ELEMENT TO BE EXPRESSED IN MEANS PLUS FUNCTION LANGUAGE, THIS DOES NOT MEAN THAT EVERY MEANS OR STRUCTURE FOR PERFORMING THE FUNCTION SPECIFIED IN THE CLAIM ELEMENT IS EQUIVALENT TO THE STRUCTURE DISCLOSED IN THE PATENT SPECIFICATION. THE PATENT OWNER'S BURDEN IN THIS REGARD, IF THE ACCUSED STRUCTURE IS NOT IDENTICAL TO THAT DESCRIBED IN THE PATENT SPECIFICATION, IS TO PROVE BY A PREPONDERANCE OF THE EVIDENCE THAT THE MEANS IN THE ACCUSED DEVICE EMPLOYS THE CORRESPONDING STRUCTURE OR ACTS DESCRIBED

IN THE SPECIFICATION, OR AN EQUIVALENT THEREOF.

THIS ISSUE OF EQUIVALENCE IS FOR YOU, THE JURY, TO DETERMINE. YOUR DUTY IN THIS REGARD IS TO EXAMINE THE PATENT SPECIFICATION TO IDENTIFY THE DISCLOSED MEANS TO PERFORM A FUNCTION SPECIFIED IN A MEANS PLUS FUNCTION CLAIM ELEMENT WHICH THE PLAINTIFF ALLEGES HAS BEEN INFRINGED, AND THEN TO DETERMINE WHETHER THE ACCUSED DEVICE USED AN EQUIVALENT OF THE DISCLOSED MEANS TO PERFORM THE IDENTICAL FUNCTION.

I INSTRUCT YOU THAT IN THIS CASE, THE PLAINTIFF IPIX DOES NOT CONTEND THAT THE IMAGE TRANSFORM PROCESSOR MEANS SET FORTH IN THE CLAIMS OF THE '667 PATENT IS

FOUND LITERALLY IN THE INFINITE PICTURES SYSTEM.

LADIES AND GENTLEMEN OF THE JURY:

TO SUMMARIZE UP TO THIS POINT, I HAVE INSTRUCTED YOU CONCERNING THE PLAINTIFF'S THEORIES OF DIRECT INFRINGEMENT, CONTRIBUTORY INFRINGEMENT, AND INDUCEMENT OF INFRINGEMENT. I HAVE INSTRUCTED YOU THAT UNDER ANY OF THESE THEORIES, A PATENT OWNER MAY SEEK TO PROVE LITERAL INFRINGEMENT OR INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS, OR BOTH. WITH RESPECT TO LITERAL INFRINGEMENT, PROOF OF INFRINGEMENT OF A CLAIM REQUIRES PROOF THAT THE ACCUSED DEVICE INCLUDES EVERY ELEMENT OF THAT CLAIM. THIS IS NO LESS TRUE WITH RESPECT TO LITERAL INFRINGEMENT OF A CLAIM WHICH INCLUDES MEANS PLUS FUNCTION LANGUAGE, WITH THE PROVISO THAT

WITH RESPECT TO ANY CLAIM ELEMENT STATED IN MEANS PLUS FUNCTION LANGUAGE, THE PATENT OWNER MUST PROVE IDENTITY OF FUNCTION BETWEEN THE CLAIM ELEMENT AND THE CORRESPONDING ELEMENT OF THE ACCUSED DEVICE, AND THAT THE ACCUSED DEVICE EITHER CONTAINS THE STRUCTURE OR ACTS TO PERFORM THIS FUNCTION THAT IS DISCLOSED IN THE PATENT SPECIFICATION, OR SOME EQUIVALENT STRUCTURE OR ACTS.

IN THIS CIVIL ACTION, THE PLAINTIFF CONCEDES THAT IT CANNOT PROVE LITERAL INFRINGEMENT BY THE DEFENDANT INFINITE PICTURES OF ONE ELEMENT OF CLAIM 1 OF THE '667 PATENT, THE IMAGE TRANSFORM PROCESSOR MEANS ELEMENT. AS I HAVE INSTRUCTED YOU, THE DEFENDANT INFINITE PICTURES SAYS THAT

THERE IS ALSO NO LITERAL INFRINGEMENT OF THE MICROPROCESSOR MEANS ELEMENT OF CLAIM 1 OF THE PATENT. THIS CLAIM ELEMENT REFERS TO

> MICROPROCESSOR MEANS FOR RECEIVING SAID SELECTED VIEWING ANGLES AND MAGNIFICATION FROM SAID INPUT MEANS AND FOR CONVERTING SAID SELECTED VIEWING ANGLES AND MAGNIFICATION FOR INPUT TO SAID IMAGE TRANSFORM PROCESSOR MEANS TO CONTROL SAID PROCESSING OF SAID TRANSFORM PROCESSOR MEANS.

THE DEFENDANT INFINITE PICTURES SAYS THAT IF A DEVICE USING ITS SOFTWARE DOES NOT INPUT

THE USER'S VIEWING ANGLES AND MAGNIFICATION SELECTIONS TO THE IMAGE TRANSFORM PROCESSOR MEANS TO CONTROL THE PROCESSING OF THE IMAGE TRANSFORM PROCESSOR MEANS TO REMOVE DISTORTION FROM A SELECTED PORTION OF THE INPUT FISHEYE IMAGE IN THE INPUT IMAGE MEMORY MEANS, AS OPPOSED TO REMOVING DISTORTION FROM THE ENTIRE INPUT IMAGE SEPARATELY FROM SELECTING THE USER'S VIEWING ANGLES AND MAGNIFICATION, THERE IS NO LITERAL INFRINGEMENT OF THIS CLAIM ELEMENT.

THE DEFENDANT INFINITE PICTURES ALSO DENIES LITERAL INFRINGEMENT OF CLAIM 1 OF THE '667 PATENT WITH RESPECT TO THE OVERALL DESIGNATION OF THE CLAIMED INVENTION IN THE PREAMBLE OF CLAIM 1, THE CLAIM LANGUAGE

BEFORE THE SUBPARAGRAPHS WHICH STATE CLAIM ELEMENTS, AS "A DEVICE FOR PROVIDING PERSPECTIVE CORRECTED VIEWS." THE DEFENDANT INFINITE PICTURES SAYS THAT PROVIDING PERSPECTIVE-CORRECTED VIEWS IS A FUNCTION OF CLAIM 1, THAT THIS CLAIM IS EXPRESSED IN MEANS PLUS FUNCTION LANGUAGE WITH RESPECT TO THIS FUNCTION, AND THAT ITS SMOOTHMOVE PANORAMA WEB BUILDER SOFTWARE DOES NOT EMPLOY THE SAME STRUCTURE OR ACTS AS THE CLAIMED INVENTION FOR PERFORMING THIS FUNCTION.

THIS BRINGS US TO INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS. PLEASE DO NOT CONFUSE THIS DOCTRINE WITH THE REQUIREMENT OF EQUIVALENT STRUCTURE OR ACTS UNDER SECTION 112, PARAGRAPH 6, CONCERNING MEANS PLUS FUNCTION CLAIM ELEMENTS. THAT REQUIREMENT OF EQUIVALENT STRUCTURE OR ACTS IS A LIMITATION ON THE STATUTORY GRANT OF AUTHORITY TO EXPRESS A CLAIM IN MEANS PLUS FUNCTION LANGUAGE, SO THAT NOT EVERY STRUCTURE WHICH PERFORMS THE FUNCTION SPECIFIED IN THE CLAIM IS COVERED BY THE CLAIM. A FINDING THAT AN ACCUSED DEVICE INFRINGES A MEANS PLUS FUNCTION PATENT CLAIM ON THE BASIS OF A FINDING OF IDENTICAL FUNCTION AND

EQUIVALENT STRUCTURE OR ACTS IS A FINDING OF LITERAL INFRINGEMENT.

THE DOCTRINE OF EQUIVALENTS, ON THE OTHER HAND, PERMITS A PATENT OWNER TO PROVE INFRINGEMENT EVEN WHERE LITERAL INFRINGEMENT CANNOT BE SHOWN. THE DOCTRINE OF EQUIVALENTS EXISTS TO PREVENT A PATENT OWNER FROM BEING DEPRIVED OF THE BENEFITS OF ITS PATENT BY COMPETITORS WHO APPROPRIATE THE HEART OF THE PATENTED INVENTION WHILE TECHNICALLY AVOIDING LITERAL INFRINGEMENT OF THE PATENT CLAIMS. IN A CASE IN WHICH A PATENT OWNER SEEKS TO PROVE INFRINGEMENT OF A PATENT CLAIM UNDER THE DOCTRINE OF EQUIVALENTS, THE PATENT OWNER MUST PROVE BY A PREPONDERANCE OF THE EVIDENCE THAT THE

ACCUSED DEVICE PERFORMS SUBSTANTIALLY THE SAME FUNCTION THAT IS PERFORMED BY THE DEVICE CLAIMED, IN SUBSTANTIALLY THE SAME WAY, TO PRODUCE SUBSTANTIALLY THE SAME RESULT. IN OTHER WORDS, THE PATENT OWNER MUST PROVE BY A PREPONDERANCE OF THE EVIDENCE THAT THERE IS IN THE ACCUSED DEVICE AN EQUIVALENT FOR EACH ELEMENT RECITED IN THE CLAIM ALLEGED TO HAVE BEEN INFRINGED, AND THAT EACH SUCH EQUIVALENT IN THE ACCUSED DEVICE PERFORMS SUBSTANTIALLY THE SAME FUNCTION IN SUBSTANTIALLY THE SAME WAY TO PRODUCE SUBSTANTIALLY THE SAME RESULT AS THE CORRESPONDING ELEMENT RECITED IN THE INFRINGED CLAIM. AN ALTERNATIVE FORMULATION OF THE TEST UNDER THE

DOCTRINE OF EQUIVALENTS IS WHETHER THE DIFFERENCES BETWEEN THE CLAIMED DEVICE AND THE ACCUSED DEVICE ARE INSUBSTANTIAL. UNDER EITHER FORMULATION, ALL ELEMENTS OF A CLAIMED INVENTION, OR THEIR EQUIVALENTS, MUST BE FOUND BY YOU IN THE ACCUSED DEVICE.

THE ISSUED OF TECHNOLOGIC EQUIVALENCY BETWEEN A CLAIM ELEMENT AND AN ELEMENT IN AN ACCUSED DEVICE IS AN ISSUE OF FACT FOR YOU, THE JURY, TO DETERMINE. IN DECIDING THE ISSUE OF EQUIVALENCY, YOU MAY TAKE INTO ACCOUNT SUCH EVIDENCE AS EXPERT TESTIMONY, DOCUMENTS, AND THE DISCLOSURES MADE IN PRIOR ART.

IN APPLYING THE DOCTRINE OF EQUIVALENTS, A PATENT CLAIM CANNOT BE CONSTRUED IN A MANNER INCONSISTENT WITH

ANY LIMITATIONS ADDED TO THE CLAIM OR ARGUMENTS MADE TO RENDER THE CLAIM PATENTABLE DURING THE PROSECUTION OF THE APPLICATION WHICH RESULTED IN THE PATENT. A PATENT OWNER MAY NOT RELY ON THE DOCTRINE OF EQUIVALENTS TO TREAT AS INFRINGING ANY DEVICE THAT IS THE SAME AS OR WOULD BE OBVIOUS FROM THE PRIOR ART.

THE DOCTRINE OF EQUIVALENTS CANNOT BE USED TO ENLARGE THE BOUNDS OF A PATENTED INVENTION BEYOND WHAT IS CLAIMED. HOWEVER, THE BOUNDS OF A PATENTED INVENTION ARE NOT ENLARGED IF YOU DO NOT GO BEYOND THE SUBSTITUTION OF EQUIVALENT ELEMENTS. NOR CAN THE DOCTRINE BE USED TO ELIMINATE IN EFFECT AN ELEMENT OF A CLAIM, OR A CLAIM LIMITATION IN THE PATENT.

EACH ELEMENT OF A PATENT CLAIM IS MATERIAL IN DEFINING THE SCOPE OF THE CLAIMED INVENTION, AND SO THAT DOCTRINE OF EQUIVALENTS APPLIES TO THE INDIVIDUAL ELEMENTS OF A CLAIM, NOT TO THE INVENTION AS A WHOLE. IN APPLYING THE DOCTRINE OF EQUIVALENTS, YOU ARE TO ANALYZE THE ROLE OF EACH ELEMENT IN THE CONTEXT OF THE PATENT CLAIM UNDER CONSIDERATION BY YOU.

WITH RESPECT TO THE IMAGE TRANSFORM PROCESSOR MEANS ELEMENT OF CLAIM 1 OF THE '667 PATENT, YOU WILL RECALL THAT IT CALLS FOR SUCH MEANS FOR PROCESSING THE DIGITIZED SIGNALS DERIVED FROM THE OPTICAL IMAGES CAPTURED WITH A CAMERA "ACCORDING TO SELECTED VIEWING ANGLES AND MAGNIFICATION," AND THAT THE IMAGE

TRANSFORM PROCESSOR MEANS PRODUCES OUTPUT TRANSFORM CALCULATION SIGNALS "ACCORDING TOA COMBINATION OF SAID DIGITIZED SIGNALS, SAID SELECTED VIEWING ANGLES, AND SAID SELECTED MAGNIFICATION," IN THE ACCUSED DEVICE, THE DEFENDANT INFINITE PICTURES' SMOOTHMOVE PANORAMA WEB BUILDER SOFTWARE, CONSISTING OF THE SMOOTHMOVE PHOTO SEAMER AND THE SMOOTHMOVE VIEWER, THERE IS PROCESSING ACCORDING TO USER INPUTS OF VIEWING ANGLE AND MAGNIFICATION OF DATA DERIVED FROM ONE OR MORE PHOTOGRAPHS DIGITIZED AND STORED IN AN EQUIRECTANGULAR PANORAMA FORMAT, THE PAN FILE BIT MAP. THE EQUIRECTANGULAR PANORAMA IS FIRST CREATED BY CONVERTING THE ENTIRE INPUT

FISHEYE IMAGE, INDEPENDENTLY OF USER INPUTS. THE PLAINTIFF IPIX SAYS IN THIS CIVIL ACTION THAT THE EQUIRECTANGULAR PANORAMA FORMAT IS AN ALTERNATIVE, INTERCHANGEABLE FORMAT FOR REPRESENTING DIGITIZED SIGNALS CORRESPONDING TO AN IMAGE CAPTURED WITH A FISHEYE LENS, AND THAT THE INTERCHANGEABILITY OF THIS FORMAT WITH THE CLAIMED IMAGE TRANSFORM PROCESSOR MEANS ELEMENT WAS KNOWN TO PERSONS REASONABLY SKILLED IN THE ART AT THE TIME OF THE APPLICATION FOR THE '667 PATENT.

IN DECIDING WHETHER THERE IS INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS, YOU WILL NEED TO DECIDE WHETHER THE SUBSTITUTION OF AN EQUIRECTANGULAR PANORAMA PRODUCES A

SUBSTANTIAL EQUIVALENT OF THE IMAGE TRANSFORM PROCESSOR ELEMENT OF THE CLAIMED INVENTION. TO BE A "SUBSTANTIAL EQUIVALENT," THE ELEMENT SUBSTITUTED IN THE ACCUSED DEVICE FOR THE ELEMENT SET FORTH IN THE CLAIM MUST NOT BE SUCH AS WOULD SUBSTANTIALLY CHANGE THE WAY IN WHICH THE FUNCTION OF THE CLAIMED INVENTION IS PERFORMED. STATED ANOTHER WAY, THE DIFFERENCES BETWEEN THE CLAIMED DEVICE AND THE ACCUSED DEVICE MUST BE INSUBSTANTIAL.

Excerpt from trial testimony of Dr. H. Lee Martin, January 5, 1998, p. 129:

Q. Tell about how the OV-4 came to exist and what it contains?

A. Sure. The OV-4 essentially implemented the algorithms that are described and the methods described in order to take an input image and create an output image and allow you to look around that output place.

Q. Is the OV-4 a general purpose computer?

A. It can perform massive computations, but it is not a general purpose computer.

Q. You used the general purpose computer the first time. Why not use the general purpose computer in Phase II?

A. We simply needed to optimize the speed of processing. At that juncture the best way to do it was essentially to design a piece of equipment to accomplish that.

Q. What if general purpose computers had been faster?

A. Essentially if general purpose computers had been faster we would have implemented to a general purpose computer. That is the way we started on the Macintosh.

Excerpt from trial testimony of Dr. J. Douglas Birdwell, January 7, 1998, pp. 132-133:

Q. Using plaintiff's exhibit 307 can you explain to us how this summarizes your opinion that [sic] regarding the fisheye lens?

A. Yes. There is a quote from the declaration of Infinite Pictures software engineer Scott Gilbert. The quote is "azimuthal equidistant projection is mathematically equivalent to the projection created by an equidistant fisheye lens." The circular image on the left-hand sight [sic] is representative of the fisheye lens picture. The azimuthal equidistant projection is the mathematical name of the transformation from the spherical coordinates or world use of a fisheye lens to what is actually imaged on the plane.

He also states that "the gnomonic projection is mathematically equivalent to the perspective projection in both the Omniview IPIX and Smoothmove systems." The gnomonic projection is the mathematical name of the projection that gives me half the perspectively correct image from spherical data that makes it look correct, as if I were there looking around looking at this visual environment.

Excerpt from trial testimony of Dr. J. Douglas Birdwell, January 7, 1998, pp. 134-135:

Q. We would like to publish it [Trial Exhibit 337] to the jury, place it on the view graph. Summary of Doctrine of Equivalents. Can you explain to us how that summarizes your opinions concerning the equivalence between the accused system and the claim of the '667 patent?

A. Yes. Both the '667 patent and the Infinite Pictures software utilize the gnomonic projection also supported by the declaration of Scott Gilbert the Infinite Pictures software engineer. There's a description of gnomonic projection which is mathematically equivalent to the perspective correction in both the Omniview – and it says the geometry for the oblique projection is from a textbook in Figure 3.

Q. You say a textbook on projections. Does that bear relation to Mr. Gilbert's declaration?

A. I [sic] was attached to the declaration as an exhibit.

Q. Continue.

A. Figure 4 at the bottom left-hand corner is Figure 4 from the '667 patent. It corresponds to the geometry of the perspectively correct projection.

Q. And according to the patent, is that the geometry that is implemented in the image transform processor?

A. Yes.

Excerpt from U.S. Patent 5,185,667 at column 8, lines 1-4:

In addition, these postulates and mathematical equations can be modified for various lens elements as necessary for the desired field-of-view coverage in a given application.